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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,523	07/05/2001	Rick Winter		9914

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EXAMINER	
SIEFKE, SAMUEL P	

ART UNIT	PAPER NUMBER
1743	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

LD

Office Action Summary	Application No.	Applicant(s)	
	09/899,523	WINTER, RICK	
	Examiner	Art Unit	
	Samuel P. Siefke	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) *12-17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 18-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims **1,5,6, 18** and **21** are rejected under 35 U.S.C. 102(e) as being anticipated by Eidler et al. (USPN 6,242,125).

Eidler discloses a battery circulation system that comprises a container (13, containment member; col. 3, lines 58- lines 66) which provides flowing electrolyte to at least one stack of a flowing electrolyte battery (19, col. 3, line 66- col. 4, line 3); liquid level sensors (130) are provided in each electrolyte reservoir and couple in data exchange relation to the controller (21) (col. 6, lines 11-20). If an imbalance in levels is sensed, as indicated by a high liquid level sensor value, the speed of the anolyte pump (30) may adjust to even out the levels. As with a high level condition, if both liquid level sensors in the reservoirs 15 and 17 sensed a "low" level, the batteries 19 are shut down by the controller. Such a condition would indicate a leak of electrolyte from some

location in the system 10 (col. 6, lines 26-33). Once shut down the leak could be investigated and repaired before the battery was again operated. The wire diagram can be seen if Figure 1A, which includes a controller being connected with the level sensors and power leads in parallel connections which include switches.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims **2-4**, **7-11, 19** and **20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Eidler et al. (USPN 6,242,125) in view of Barr et al. (USPN 4,628,302).

Eidler discloses a battery circulation system as discussed above.

Eidler discusses a liquid level sensor that triggers a response to a low or high level of an electrolyte in a reservoir but doest not specifically disclose a circuit is switched on or off when a liquid completes the circuit.

Barr teaches a simple liquid level sensor that comprises a first probe and a second probe, and liquid that comes into contact with both probes to complete a circuit (col. 1, lines 6-27; col. 2, line 59 –col. 3, line 40) and close the circuit. A resistor is positioned parallel to multiple switches (col. 4, lines 7-25). All the switches are wired to a controller (41). It would have been obvious to modify Eidler to include the liquid sensor of Barr because these sensors are known in the art to be used to close circuits when a liquid is present, in this case to shut down pumps in order to contain a leak and investigate further where the leak is coming from. It would have been obvious to include such a sensor "switch" within the circulation system of Eidler as the liquid being sensed is an electrolyte which would be capable of providing the circuit completion. Such a modification would also allow placement of the switch at a point in the system of Eilder which would minimize electrolyte leakage.

Response to Arguments

Applicant's arguments filed 1/10/05 have been fully considered but they are not persuasive. Applicant argues, "As known in the art, a containment member is not synonymous with a reservoir." The Examiner respectfully disagrees with applicant's interpretation of the phrase containment member. To contain is to hold within, retain. A

container is one that contains, and containment is the act, process, or means of containing. A reservoir does just this, "a part of an apparatus in which a liquid is held" as defined by Webster's Ninth New Collegiate Dictionary.

Applicant argues, "Speigel does not teach or suggest a means for sensing a fluid leak within the containment member." Speigel is not a reference that is used in any rejection found within the Office action, the Examiner is interpreting Speigel as being Eidler. Since the Office has distinguished that reservoir and containment are synonymous with each other and Eidler uses liquid level sensors to detect a leak (col. 6, lines 26-33) within the reservoirs, all the limitations are anticipated.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

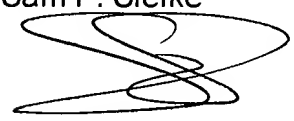
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel P. Siefke whose telephone number is 571-272-1262. The examiner can normally be reached on M-F 7:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam P. Siefke



April 1, 2005

M. T. Cole
Monique T. Cole
Primary Examiner
Art Unit 1743